

CLAIMS

I/We claim:

- [c1] 1. A system for handling aircraft control information, comprising:
a display medium coupleable to a flight manager, the flight manager being configured to receive and direct instructions for automatically controlling aircraft functions at a future time during flight of the aircraft; and
a display controller coupled to the display medium to present at least one operator activatable element at the display medium and update information presented at the display medium when the operator activates the operator activatable element.
- [c2] 2. The system of claim 1 wherein the display controller is configured to direct a display of information corresponding to uncompleted segments of a flight plan.
- [c3] 3. The system of claim 1, further comprising the flight manager, and wherein the flight manager is operatively coupled to flight control surfaces of the aircraft, and wherein the flight manager is further configured to receive and direct instructions for automatically controlling the aircraft at least approximately immediately upon receipt.
- [c4] 4. The system of claim 1, further comprising the flight manager, and wherein the flight manager is configured to automatically provide guidance cues to the operator.

- [c5] 5. The system of claim 1, further comprising a cursor control device operatively coupled to the display medium, and wherein the cursor control device is configured to direct the movement of a cursor at the display medium.
- [c6] 6. The system of claim 1, further comprising a keyboard operatively coupled to the display medium.
- [c7] 7. The system of claim 1 wherein the display controller is configured to present at least one operator activatable element having an appearance generally similar to that of a mechanical switch.
- [c8] 8. The system of claim 1 wherein the display controller is configured to:
 receive an input corresponding to a proposed value to be submitted to the
 flight manager;
 display the input at a preview display field; and
 upon receiving a signal authorized by the operator, submit the proposed
 value to the flight manager.
- [c9] 9. The system of claim 1 wherein the display controller is configured to display a plurality of operator activatable elements, with a first one of the operator activatable elements displayed in a first manner and a second one of the operator activatable elements displayed in a second manner visually different than the first manner, with the second operator activatable element corresponding to an active display field selected for updating.
- [c10] 10. A system for handling aircraft control information, comprising:
 a flight manager configured to receive and direct instructions for
 automatically controlling aircraft function at a future time;
 a display medium operatively coupled to the flight manager to display
 information corresponding to the instructions;

a display controller operatively coupled to the display medium to present at least one operator activatable icon and a control icon at the display medium;

a tracking device operatively coupled to the display medium to move the control icon; and wherein

the display controller is configured to update the information presented at the display medium when the operator aligns the control icon with the operator activatable element and activates the tracking device.

[c11] 11. The system of claim 10 wherein the tracking device includes a cursor control device.

[c12] 12. The system of claim 10 wherein the display controller is configured to display a plurality of operator activatable elements, with a first one of the operator activatable elements displayed in a first manner and a second one of the operator activatable elements displayed in a second manner visually different than the first manner, with the second operator activatable element corresponding to an active display field selected for updating.

[c13] 13. An aircraft, comprising:
a fuselage portion;
a wing portion depending from the fuselage portion;
a flight deck;
a display medium housed at the flight deck and coupleable to a flight manager, the flight manager being configured to receive and direct instructions for automatically controlling aircraft behavior at a future time; and
a display controller coupled to the display medium to present at least one operator activatable element at the display medium and update

information presented at the display medium when the operator activates the operator activatable element.

[c14] 14. The system of claim 13, further comprising the flight manager, and wherein the flight manager is operatively coupled to flight control surfaces of the aircraft.

[c15] 15. The system of claim 13, further comprising the flight manager, and wherein the flight manager is configured to automatically provide guidance cues to the operator.

[c16] 16. The system of claim 13, further comprising a cursor control device operatively coupled to the display medium, and wherein the cursor control device is configured to direct the movement of a cursor at the display medium.

[c17] 17. The system of claim 13, further comprising a keyboard operatively coupled to the display medium.

[c18] 18. The system of claim 13 wherein the display controller is configured to present at least one operator activatable element having an appearance generally similar to that of a mechanical switch.

[c19] 19. The system of claim 13 wherein the display controller is configured to:

receive an input corresponding to a proposed value to be submitted to the flight manager;
display the input at a preview display field; and
upon receiving a signal authorized by the operator, submit the proposed value to the flight manager.

[c20] 20. The system of claim 13 wherein the display controller is configured to display a plurality of operator activatable elements, with a first one of the operator activatable elements displayed in a first manner and a second one of the operator activatable elements displayed in a second manner visually different than the first manner, with the second operator activatable element corresponding to an active display field selected for updating.

[c21] 21. A system for handling aircraft control information, comprising:
display means coupleable to a flight manager, the flight manager being configured to receive and direct instructions for automatically controlling aircraft behavior at a future time; and
control means coupled to the display means to present at least one operator activatable element at the display medium and update information presented at the display medium when the operator activates the operator activatable element.

[c22] 22. The system of claim 21 wherein the control means is configured to direct a display of information corresponding to uncompleted segments of a flight plan.

[c23] 23. The system of claim 21, further comprising the flight manager, and wherein the flight manager is operatively coupled to flight control surfaces of the aircraft.

[c24] 24. The system of claim 21, further comprising a cursor control device operatively coupled to the display medium, and wherein the cursor control device is configured to direct the movement of a cursor at the display medium.

[c25] 25. The system of claim 21, further comprising a keyboard operatively coupled to the display medium.

[c26] 26. The system of claim 21 wherein the control means is configured to:
receive an input corresponding to a proposed value to be submitted to the
flight manager;
display the input at a preview display field; and
upon receiving a signal authorized by the operator, submit the proposed
value to the flight manager.

[c27] 27. The system of claim 21 wherein the display controller is configured
to display a plurality of operator activatable elements, with a first one of the
operator activatable elements displayed in a first manner and a second one of the
operator activatable elements displayed in a second manner visually different than
the first manner, with the second operator activatable element corresponding to
an active display field selected for updating.

[c28] 28. A computer-readable medium having contents configured to carry
out a method for handling aircraft control information, comprising:
presenting at a display medium at least one operator activatable element;
and
in response to receiving a signal input by the operator and corresponding to
an activation of the operator activatable element, changing at least a
portion of information presented at the display medium, the
information corresponding to instructions for automatically controlling
aircraft functions at a future time during flight of the aircraft.

[c29] 29. The computer-readable medium of claim 28 wherein presenting at
least one operator activatable element includes presenting an icon representing a
switch.

[c30] 30. The computer-readable medium of claim 28 wherein receiving a
signal includes receiving a signal when the operator activates the operator

activatable element by manipulating a tracking device to align a control icon with the operator selectable icon and activating the tracking device.

[c31] 31. The computer-readable medium of claim 28 wherein the method further comprises displaying the information corresponding to the instructions in a manner generally similar to a manner in which the information is displayed on control display unit.

[c32] 32. The computer-readable medium of claim 28 wherein presenting at least one operator activatable element includes presenting a plurality of operator activatable elements and highlighting one of the at least one operator activatable elements upon receiving a signal authorized by the operator.

[c33] 33. The computer-readable medium of claim 28 wherein the method further comprises:
receiving an input from the operator corresponding to a proposed update for information presented at the display medium; and
presenting the input at a preview field of the display medium, and wherein changing at least a portion of the information presented at the display medium includes updating the information to include the input.

[c34] 34. A method for handling aircraft control information, comprising:
presenting at a display medium at least one operator activatable element;
and
in response to receiving a signal input by the operator and corresponding to an activation of the operator activatable element, changing at least a portion of information presented at the display medium, the information corresponding to instructions for automatically controlling functions of the aircraft at a future time during flight of the aircraft.

- [c35] 35. The method of claim 34 wherein presenting at least one operator activatable element includes presenting an icon representing a switch.
- [c36] 36. The method of claim 34 wherein receiving a signal includes receiving a signal when the operator activates the operator activatable element by manipulating a tracking device to align a control icon with the operator selectable icon and activating the tracking device.
- [c37] 37. The method of claim 34, further comprising displaying the information corresponding to the instructions in a manner generally similar to a manner in which the information is displayed at an aircraft control display unit.
- [c38] 38. The method of claim 34 wherein presenting at least one operator activatable element includes presenting a plurality of operator activatable elements arranged in two columns.
- [c39] 39. The method of claim 34 wherein presenting at least one operator activatable element includes presenting a plurality of operator activatable elements and highlighting one of the at least one operator activatable elements upon receiving a signal authorized by the operator.
- [c40] 40. The method of claim 34 wherein presenting at a display medium includes displaying at a computer screen.
- [c41] 41. The method of claim 34 wherein changing at least a portion of information presented at the display medium includes updating a flight plan list that includes flight segments to be flown at a future time.

[c42] 42. The method of claim 34, further comprising:
receiving an input from the operator corresponding to a proposed update
for information presented at the display medium; and
presenting the input at a preview field of the display medium, and wherein
changing at least a portion of the information presented at the
display medium includes updating the information to include the
input.

[c43] 43. The method of claim 34, further comprising receiving the signal input
by the operator, and wherein receiving the signal includes receiving the signal
when the operator strikes an input key.

[c44] 44. A method for handling aircraft control information, comprising:
presenting information at a display medium, the information corresponding
to instructions for flying a plurality of flight segments with at least one
of the instructions to be executed at a future time during aircraft
flight;
presenting at the display medium at least one operator selectable element;
receiving a signal input by the operator and corresponding to a selection of
the operator selectable element; and
based on the signal input by the operator, changing at least a portion of the
information presented at the display medium.

[c45] 45. The method of claim 44, further comprising:
receiving an input from the operator corresponding to a proposed update
for information presented at the display medium; and
presenting the input at a preview field of the display medium, and wherein
changing at least a portion of the information presented at the
display medium includes updating the information to include the
input.

[c46] 46. A computer-implemented method for handling aircraft control information, comprising:

presenting information at a display medium, the information corresponding to instructions for flying a plurality of flight segments with at least one of the instructions to be executed at a future time;

receiving a proposed update for the information from an operator via a keypad;

presenting the proposed update at a preview field of the display medium;

presenting at the display medium at least one operator selectable icon corresponding to an active field of the display medium;

receiving a signal input by an operator and corresponding to a selection of the operator selectable icon when the operator manipulates a tracking device to move a control icon into alignment with the operator selectable icon and activates the tracking device; and

based on the signal input by the operator, updating the active field presented at the display medium to include the proposed update.

[c47] 47. The method of claim 46, further comprising automatically implementing the instruction to change a behavior of the aircraft.

[c48] 48. The method of claim 46 wherein updating at least a portion of the information includes updating a numerical value.